

Title (en)
Assembly of toothed wheels for a bicycle

Title (de)
Anordnung von Zahnradern für ein Fahrrad

Title (fr)
Ensemble de roues dentées pour bicyclette

Publication
EP 2022713 A3 20120425 (EN)

Application
EP 08005989 A 20080328

Priority
IT MI20071661 A 20070809

Abstract (en)
[origin: EP2022713A2] The invention relates to an assembly (42, 44, 46) of toothed wheels (1-11) of a bicycle, comprising at least two toothed wheels (2, 3) of different diameter and at least one support member (60) of at least one toothed wheel (2) of said at least two toothed wheels on a component of a bicycle, like for example a free body (22) of a hub for a rear bicycle wheel. According to the invention, said at least one support member (60) is at least partially housed in at least one cavity of at least one other toothed wheel (3) of said at least two toothed wheels. In this way, the distance between the toothed wheels is lower than the thickness of the support member of the toothed wheels themselves. The support member can thus maintain a strong resistant section at the attachment area to the respective toothed wheel. At the same time, it is possible to mount a greater number of sprockets on a free body of standard size than that of the prior art.

IPC 8 full level
B62M 9/10 (2006.01); **B62M 9/12** (2006.01)

CPC (source: EP US)
B62M 9/10 (2013.01 - EP US); **B62M 9/105** (2013.01 - EP US); **B62M 9/12** (2013.01 - EP US)

Citation (search report)

- [XY] EP 1688345 A2 20060809 - SHIMANO KK [JP]
- [X] US 6428437 B1 20020806 - SCHLANGER RAPHAEL [US]
- [YA] EP 1431172 A2 20040623 - SRAM DE GMBH [DE]
- [Y] FR 989114 A 19510905 - VANDEVOIR

Cited by
DE102019202541A1; EP2045181A1; EP2641823A3; US8821330B2; US9272750B2; US12030586B2; US9550547B2; US8764594B2; US10337599B2; US10408326B2; US11485449B2; US10604213B2; US11351815B2; WO2017039442A3; US8454461B2; US9850992B2; US11383553B2; US11932351B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
EP 2022713 A2 20090211; EP 2022713 A3 20120425; EP 2022713 B1 20130522; CN 101362503 A 20090211; CN 101362503 B 20131106; IT MI20071661 A1 20090210; JP 2009078799 A 20090416; JP 5634018 B2 20141203; RU 2008132881 A 20100220; TW 200911618 A 20090316; TW I455849 B 20141011; US 2009042679 A1 20090212; US 9550547 B2 20170124

DOCDB simple family (application)
EP 08005989 A 20080328; CN 200810210251 A 20080811; IT MI20071661 A 20070809; JP 2008205211 A 20080808; RU 2008132881 A 20080808; TW 97129116 A 20080731; US 18757708 A 20080807